

**SEQUENCE LISTING**

<110> Tang, Y. Tom  
Guegler, Karl J.  
Corley, Neil C.  
Gorgone, Gina A.  
Yue, Henry

<120> CALCIUM BINDING PROTEIN

<130> PF-0635-2 DIV

<140> To Be As:  
<141> Herewith

<160> 5

## <170> PERL Program

<210> 1  
<211> 337  
<212> PRT  
<213> Homo sapiens

<220> -  
<223> 3734805

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Glu Ile Val Lys Ile Leu Lys Asp Asn Leu Ala Ile Leu Glu Lys
      20          25          30
Gln Asp Lys Lys Thr Asp Lys Ala Ser Glu Glu Val Ser Lys Ser
      35          40          45
Leu Gln Ala Met Lys Glu Ile Leu Cys Gly Thr Asn Glu Lys Glu
      50          55          60
Pro Pro Thr Glu Ala Val Ala Gln Leu Ala Gln Glu Leu Tyr Ser
      65          70          75
Ser Gly Leu Leu Val Thr Leu Ile Ala Asp Leu Gln Leu Ile Asp
      80          85          90
Phe Glu Gly Lys Lys Asp Val Thr Gln Ile Phe Asn Asn Ile Leu
      95         100         105
Arg Arg Gln Ile Gly Thr Arg Ser Pro Thr Val Glu Tyr Ile Ser
     110         115         120
Ala His Pro His Ile Leu Phe Met Leu Leu Lys Gly Tyr Glu Ala
     125         130         135
Pro Gln Ile Ala Leu Arg Cys Gly Ile Met Leu Arg Glu Cys Ile
     140         145         150
Arg His Glu Pro Leu Ala Lys Ile Ile Leu Phe Ser Asn Gln Phe
     155         160         165
Arg Asp Phe Phe Lys Tyr Val Glu Leu Ser Thr Phe Asp Ile Ala
     170         175         180
Ser Asp Ala Phe Ala Thr Phe Lys Asp Leu Leu Thr Arg His Lys
     185         190         195
Val Leu Val Ala Asp Phe Leu Glu Gln Asn Tyr Asp Thr Ile Phe
     200         205         210
Glu Asp Tyr Glu Lys Leu Leu Gln Ser Glu Asn Tyr Val Thr Lys
     215         220         225

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PF-0635-2 DIV

Arg Gln Ser Leu Lys Leu Leu Gly Glu Leu Ile Leu Asp Arg His		
230	235	240
Asn Phe Ala Ile Met Thr Lys Tyr Ile Ser Lys Pro Glu Asn Leu		
245	250	255
Lys Leu Met Met Asn Leu Leu Arg Asp Lys Ser Pro Asn Ile Gln		
260	265	270
Phe Glu Ala Phe His Val Phe Lys Val Phe Val Ala Ser Pro His		
275	280	285
Lys Thr Gln Pro Ile Val Glu Ile Leu Leu Lys Asn Gln Pro Lys		
290	295	300
Leu Ile Glu Phe Leu Ser Ser Phe Gln Lys Glu Arg Thr Asp Asp		
305	310	315
Glu Gln Phe Ala Asp Glu Lys Asn Tyr Leu Ile Lys Gln Ile Arg		
320	325	330
Asp Leu Lys Lys Thr Ala Pro		
335		

<210> 2  
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<212> DNA  
<213> Homo sapiens

<220> -  
<223> 3734805

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cacatgaaaa aaatgccttt gtttagtaaa tcacacaaaa atccagcaga aattgtgaaa 180  
atcctgaaag acaatttggc cattttggaa aagcaagaca aaaagacaga caaggcttca 240  
gaagaagtgt ctaaatcact gcaagcaatg aaagaaattc tttgtgttac aaacgagaaaa 300  
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atatttaaca acatcttgaa aagacagata ggcactcgaa gtcctactgt ggagtatatt 480  
atgtctcatc ctcataatcctt gtttatgtc ttcataaggat atgaaggcccc acagattgcc 540  
ttacgttgtg ggattatgtt gagagaatgtt attcgacatg aaccacttgc caaaatcatc 600  
ctctttctta atcaatttcg agatttctttt aagtacgtgg agttgtcaac atttgtatatt 660  
gcttcagatg cctttgtac ttcaaggat ttactaaaccat gacataaaagt gttggtagca 720  
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aaactcattt agtttcttagt cagttccaa aaagaaaggat cggatgtatgatc gcagttcgct 1080  
gacgagaaga actacttgcattt taaacagatc cgagacttgc agaaaaacggc cccttgaaga 1140  
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tcagaaagtc atcattttttt ggaagactttt ggaggtgcctt atttttctgtt ctgtatattgt 1260  
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attttagtca aaaaaaaaaaaa aaaa 1344

<210> 3  
<211> 341  
<212> PRT  
<213> Mus sp.

<220> -

PF-0635-2 DIV

<223> g262934

<400> 3

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Val Lys Asn Leu Lys Glu Ser Met Ala Val	Leu Glu Lys Gln Asp	
20 25	30	
Ile Ser Asp Lys Lys Ala Glu Lys Ala Thr	Glu Glu Val Ser Lys	
35 40	45	
Asn Leu Val Ala Met Lys Glu Ile Leu Tyr	Gly Thr Asn Glu Lys	
50 55	60	
Glu Pro Gln Thr Glu Ala Val Ala Gln Leu	Ala Gln Glu Leu Tyr	
65 70	75	
Asn Ser Gly Leu Leu Gly Thr Leu Val Ala	Asp Leu Gln Leu Ile	
80 85	90	
Asp Phe Glu Gly Lys Lys Asp Val Ala Gln	Ile Phe Asn Asn Ile	
95 100	105	
Leu Arg Arg Gln Ile Gly Thr Arg Thr	Pro Thr Val Glu Tyr Ile	
110 115	120	
Cys Thr Gln Gln Asn Ile Leu Phe Met	Leu Leu Lys Gly Tyr Glu	
125 130	135	
Ser Pro Glu Ile Ala Leu Asn Cys Gly	Ile Met Leu Arg Glu Cys	
140 145	150	
Ile Arg His Glu Pro Leu Ala Lys Ile	Ile Leu Trp Ser Glu Gln	
155 160	165	
Phe Tyr Asp Phe Phe Arg Tyr Val Glu	Met Ser Thr Phe Asp Ile	
170 175	180	
Ala Ser Asp Ala Phe Ala Thr Phe Lys	Asp Leu Leu Thr Arg His	
185 190	195	
Lys Leu Leu Ser Ala Glu Phe Leu Glu	Gln His Tyr Asp Arg Phe	
200 205	210	
Phe Ser Glu Tyr Glu Lys Leu Leu His	Ser Glu Asn Tyr Val Thr	
215 220	225	
Lys Arg Gln Ser Leu Lys Leu Leu Gly	Glu Leu Leu Leu Asp Arg	
230 235	240	
His Asn Phe Thr Ile Met Thr Lys Tyr	Ile Ser Lys Pro Glu Asn	
245 250	255	
Leu Lys Leu Met Met Asn Leu Leu Arg	Asp Lys Ser Arg Asn Ile	
260 265	270	
Gln Phe Glu Ala Phe His Val Phe Lys	Val Phe Val Ala Asn Pro	
275 280	285	
Asn Lys Thr Gln Pro Ile Leu Asp Ile	Leu Leu Lys Asn Gln Thr	
290 295	300	
Lys Leu Ile Glu Phe Leu Ser Lys Phe	Gln Asn Asp Arg Thr Glu	
305 310	315	
Asp Glu Gln Phe Asn Asp Glu Lys Thr	Tyr Leu Val Lys Gln Ile	
320 325	330	
Arg Asn Leu Lys Arg Ala Ala Gln Gln	Glu Ala	
335 340		

<210> 4

<211> 339

<212> PRT

<213> Drosophila melanogaster

<220> -

<223> g1794137

PF-0635-2 DIV

<400> 4

Met Pro Leu Phe Gly Lys Ser Gln Lys Ser Pro Val Glu Leu Val  
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Lys Ser Leu Lys Glu Ala Ile Asn Ala Leu Glu Ala Gly Asp Arg  
20 25 30  
Lys Val Glu Lys Ala Gln Glu Asp Val Ser Lys Asn Leu Val Ser  
35 40 45  
Ile Lys Asn Met Leu His Gly Ser Ser Asp Ala Glu Pro Pro Ala  
50 55 60  
Asp Tyr Val Val Ala Gln Leu Ser Gln Glu Leu Tyr Asn Ser Asn  
65 70 75  
Leu Leu Leu Leu Ile Gln Asn Leu His Arg Ile Asp Phe Glu  
80 85 90  
Gly Lys Lys His Val Ala Leu Ile Phe Asn Asn Leu Leu Arg Arg  
95 100 105  
Gln Ile Gly Thr Arg Ser Pro Thr Val Glu Tyr Ile Cys Thr Lys  
110 115 120  
Pro Glu Ile Leu Phe Thr Leu Met Ala Gly Tyr Glu Asp Ala His  
125 130 135  
Pro Glu Ile Ala Leu Asn Ser Gly Thr Met Leu Arg Glu Cys Ala  
140 145 150  
Arg Tyr Glu Ala Leu Ala Lys Ile Met Leu His Ser Asp Glu Phe  
155 160 165  
Phe Lys Phe Phe Arg Tyr Val Glu Val Ser Thr Phe Asp Ile Ala  
170 175 180  
Ser Asp Ala Phe Ser Thr Phe Lys Glu Leu Leu Thr Arg His Lys  
185 190 195  
Leu Leu Cys Ala Glu Phe Leu Asp Ala Asn Tyr Asp Lys Phe Phe  
200 205 210  
Ser Gln His Tyr Gln Arg Leu Leu Asn Ser Glu Asn Tyr Val Thr  
215 220 225  
Arg Arg Gln Ser Leu Lys Leu Leu Gly Glu Leu Leu Leu Asp Arg  
230 235 240  
His Asn Phe Thr Val Met Thr Arg Tyr Ile Ser Glu Pro Glu Asn  
245 250 255  
Leu Lys Leu Met Met Asn Met Leu Lys Glu Lys Ser Arg Asn Ile  
260 265 270  
Gln Phe Glu Ala Phe His Val Phe Lys Val Phe Val Ala Asn Pro  
275 280 285  
Asn Lys Pro Lys Pro Ile Leu Asp Ile Leu Leu Arg Asn Gln Thr  
290 295 300  
Lys Leu Val Asp Phe Leu Thr Asn Phe His Thr Asp Arg Ser Glu  
305 310 315  
Asp Glu Gln Phe Asn Asp Glu Lys Ala Tyr Leu Ile Lys Gln Ile  
320 325 330  
Lys Glu Leu Lys Pro Leu Pro Glu Ala  
335

<210> 5

<211> 377

<212> PRT

<213> Caenorhabditis elegans

<220> -

<223> g1255838

<400> 5

Met Pro Leu Leu Phe Gly Lys Ser His Lys Ser Pro Ala Asp Val  
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 Val Lys Thr Leu Arg Glu Val Leu Thr Ile Leu Asp Lys Leu Pro  
 20 25 30  
 Pro Pro Lys Leu Asp Lys Asp Gly Asn Ile Gln Ser Asp Lys Lys  
 35 40 45  
 Tyr Asp Lys Ala Leu Asp Glu Val Ser Lys Asn Val Ala Met Ile  
 50 55 60  
 Lys Ser Phe Ile Tyr Gly Asn Asp Ser Ala Glu Pro Ser Ser Glu  
 65 70 75  
 His Val Val Gln Val Ala Gln Leu Ala Gln Glu Val Tyr Asn Ala  
 80 85 90  
 Asn Ile Leu Pro Met Leu Ile Lys Met Leu Pro Lys Phe Glu Phe  
 95 100 105  
 Glu Cys Lys Lys Asp Val Gly Gln Ile Phe Asn Asn Leu Leu Arg  
 110 115 120  
 Arg Gln Ile Gly Thr Arg Ser Pro Thr Val Glu Tyr Leu Gly Ala  
 125 130 135  
 Arg Pro Glu Ile Leu Ile Gln Leu Val Gln Gly Tyr Ser Val Pro  
 140 145 150  
 Asp Ile Ala Leu Thr Cys Gly Leu Met Leu Arg Glu Ser Ile Arg  
 155 160 165  
 His Asp His Leu Ala Lys Ile Ile Leu Tyr Ser Asp Val Phe Tyr  
 170 175 180  
 Thr Phe Phe Leu Tyr Val Gln Ser Glu Val Phe Asp Ile Ser Ser  
 185 190 195  
 Asp Ala Phe Ser Thr Phe Lys Glu Leu Thr Thr Arg His Lys Ala  
 200 205 210  
 Ile Ile Ala Glu Phe Leu Asp Ser Asn Tyr Asp Thr Phe Phe Ala  
 215 220 225  
 Gln Tyr Gln Asn Leu Leu Asn Ser Lys Asn Tyr Val Thr Arg Arg  
 230 235 240  
 Gln Ser Leu Lys Leu Leu Gly Glu Leu Leu Asp Arg His Asn  
 245 250 255  
 Phe Asn Thr Met Thr Lys Tyr Ile Ser Asn Pro Asp Asn Leu Arg  
 260 265 270  
 Leu Met Met Glu Leu Leu Arg Asp Lys Ser Arg Asn Ile Gln Tyr  
 275 280 285  
 Glu Ala Phe His Val Phe Lys Val Phe Val Ala Asn Pro Asn Lys  
 290 295 300  
 Pro Lys Pro Ile Ser Asp Ile Leu Asn Arg Asn Arg Glu Lys Leu  
 305 310 315  
 Val Glu Phe Leu Ser Glu Phe His Asn Asp Arg Thr Asp Asp Glu  
 320 325 330  
 Gln Phe Asn Asp Glu Lys Ala Tyr Leu Ile Lys Gln Ile Gln Glu  
 335 340 345  
 Met Lys Ser Ser Pro Lys Glu Ala Lys Lys Pro Lys Ser Lys Glu  
 350 355 360  
 Asp Glu Asn Gln Glu Pro Ala Gly Pro Ser Glu Gly Pro Ser Thr  
 365 370 375  
 Ser Gln